

✓ Figs. 4A and ⁴B are explanatory diagrams representing the Embodiment 3 of the First Invention;

✓ Figs. 5A and ⁵B are explanatory diagrams representing the Embodiment 4 of the First Invention;

⁶ Figs. 6A and B are explanatory diagrams representing the Embodiment 5 of the First Invention;

✓ Figs. ⁷7A, ⁷B and C are explanatory diagrams representing the Embodiments 6, 7 and 10 of the First Invention;

✓ Figs. ⁸8A, ⁸B and C are explanatory diagrams representing the Embodiments 6, 8 and 10 of the First Invention;

✓ Figs. ⁹9A and B are explanatory diagrams representing the Embodiment 11 of the First Invention;

Fig. 10 is an explanatory diagram representing the Embodiment 12 of the First Invention;

Fig. 11 is an explanatory diagram representing the Embodiment 13 of the First Invention;

¹² Figs. 12A and B are explanatory diagrams representing the Embodiment 14 of the First Invention;

Fig. 13A is a perspective view representing the Embodiment 1 of the Second Invention, Fig. 13B is a cross sectional view taken in section A in Fig. 13A, and Fig. 13C is a cross sectional view taken in section B in Fig. 13A;

Fig. 14 is a cross sectional view showing the section B in Fig. 13 representing the clearance between the rib of the optical component and the holding part of the enclosure;

Fig. 15 is a perspective view representing the Embodiment 2 of the Second Invention;

Fig. 16 is an exploded perspective view representing the Embodiment 3 of the Second Invention;

Fig. 17 is a perspective view representing the Embodiment 3 of the Second Invention;

Fig. 18A is a front view representing the optical functional device (long-sized lens array) according to the art of the comparative example in the Third Invention, Fig. 18B is a side view of Fig. 18A, Fig. 18C is a front view of the holding member according to the art of the comparative example, Fig. 18D is a side view of Fig. 18C, Fig. 18E is a front view of the composite optical component according to the art of the comparative example, and Fig. 18F is a side view of Fig. 18E

Fig. 19A is a front view representing the optical functional device (long-sized lens array) according to the Embodiment 1 of the Third Invention, Fig. 19B is a side view of Fig. 19A, Fig. 19C is a front view of the holding member according to Embodiment 1, and Fig. 19D is a side view of Fig. 19C;

Fig. 20A is a front view representing the method for manufacturing composite optical component according to the Embodiment 1 of the Third Invention, and Fig. 20B is a side view of Fig. 20A;

Fig. 21A is front view representing a composite optical member according to the Embodiment 1 of the Third Invention, and Fig. 21B is a side view of Fig. 21A;

Fig. 22A is a front view representing a method for manufacturing a composite optical component according to the Embodiment 2 of the Third Invention, and Fig. 22B is a side view of Fig. 22A;

Fig. 23 is a front view representing a composite optical component according to the Embodiment 2 of the Third Invention;

Fig. 24A is a front view representing the method for manufacturing a composite optical component according to the Embodiment 3 of the Third Invention, Fig. 24B is a side view of Fig. 24A, and Fig. 24C is an enlarged view of section A in Fig. 24B;

Fig. 25A is a front view representing an optical functional device (long-sized lens array) according to the Embodiment 4 of the Third Invention, Fig. 25B is a side view of Fig. 25A, Fig. 25C is a front view representing the holding member of the Embodiment 4, and Fig. 25D is a side view of Fig. 25C;

Fig. 26A is a front view representing the method for manufacturing a composite optical component according to the Embodiment 4 of the Third Invention, and Fig. 26B is a side view of Fig. 26A; and

Fig. 27A is a front view representing the composite optical component according to the Embodiment 4 of the Third Invention, and Fig. 27B is a side view of Fig. 27A.

Please replace the paragraph at page 30, line 20 through page 31, line 9, as follows:

Further, in the Sixth Embodiment, the holding members 13a and 13b or functional device 12 is subjected to elastic deformation, as shown in Figs. 7 and 8, to fix between the holding member 13 and functional device 12, and the functional device 12 is heated to cause plastic deformation, thereby reducing the stress between two components and allowing slide-fitting between the holding member 13 and functional device 12. In other words, the holding member 13 is subjected to elastic deformation at first to fix the functional device 12 in position (Figs. 7A and 8A). Then the functional device 12 is heated over the thermal deformation temperature in a mold apparatus 21 and is soften. Then the installation portion 16 of the functional device 12 is subjected to deformation (Figs. 7B and 8B) with resilient

A2
Concluded

restoring force of the holding member 13. Further, the functional device 12 is fixed in position by cooling with a cooling means (not shown), and at the same time, and clearance is formed by the difference of shrinkages between two components, with the result that a composite body is formed (Figs. 7C and 8C).

Please replace the paragraph at page 32, lines 11-18, as follows:

A3

Further, in the mold apparatus 21, transfer of the shape of molding die functional surface is carried out in one and the same process using a mirror surface molding die 22 within the mold apparatus, as shown in Figs. 7B and 8B (Tenth Embodiment). In other words, transfer of the shape of the molding die functional surface, and slide-fitting between the functional device 12 and holding member 13 are carried out in one and the same molding step, thereby molding an integral body.

Please replace the paragraph at page 32, lines 19-27, as follows:

A4

In addition, in the Eleventh Embodiment, a rugged surface (rugged portion 23) is produced on part of the installation portion 16 of the functional device 12 on the holding member 13, as shown in Fig. 9. In this way, the slide-fitting force (friction force) can be adjusted in an arbitrary manner by changing the contact area of the functional device 12 and holding member 13. In this case, a protrusion 24 can be provided at the central portion of the holding member 13 to keep it immobile so that this portion serves as a reference, as shown in Fig. 9B.

Please replace the paragraph at page 36, lines 10-20, as follows:

AS If there is no restriction in the presence of a repeated change in temperature, misalignment may occur in the longitudinal direction. To avoid this misalignment, the lens member 110 must be fixed to the enclosure 111 somewhere. To avoid misalignment in the longitudinal direction while allowing the aforementioned difference in expansion to be eliminated smoothly, it is preferred to fix the lens member at one central point in the longitudinal direction of the lens member 110, as shown in Fig. 13C. In this example, the hemispherical contact protrusion 110b at the center is engaged with a concave formed on the bottom of the holding part 111a of the enclosure 111, and this is used as a fixing portion 15.

Please replace the paragraph at page 51, lines 12-17, as follows:

AS When pressure is applied to the spare molded product by molding dies 231 and 232 to transfer the shape of the optical functional surface, resin having moved in the direction orthogonal to the axis direction of pressure is brought in contact with the holding member 261 by the pressure of molding dies 231 and 232, as shown in Fig. 24C.